

wherein x is 1, 2, 3 or 4; m is 1 or 2; n is 1 or 2;

Q is C or N;

A is O or S;

Z is O or a bond;

R¹ is H or lower alkyl;

X is N;

R² is H, alkyl, alkoxy, halogen, amino or substituted amino;

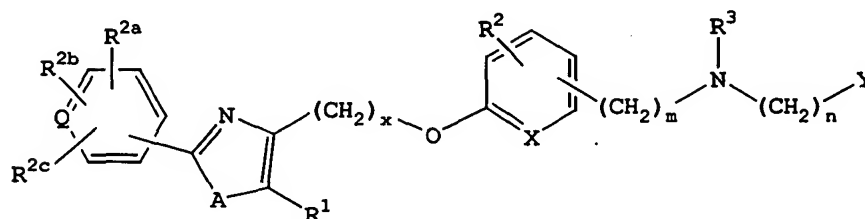
R^{2a}, R^{2b} and R^{2c} are the same or different and are selected from H, alkyl, alkoxy, halogen, amino or substituted amino;

R³ is H, alkyl, arylalkyl, aryloxy carbonyl, alkyloxy carbonyl, alkynyloxy carbonyl, alkenyloxy carbonyl, aryl carbonyl, alkyl carbonyl, aryl, heteroaryl, alkyl(halo)aryloxy carbonyl, alkyloxy(halo)aryloxy carbonyl, cycloalkylaryloxy carbonyl, cycloalkyloxyaryloxy carbonyl, cycloheteroalkyl, heteroaryl carbonyl, heteroaryl-heteroarylalkyl, alkyl carbonyl amino, aryl carbonyl amino, heteroaryl carbonyl amino, alkoxy carbonyl amino, aryloxy carbonyl amino, heteroaryloxy carbonyl amino, heteroaryl-heteroaryl carbonyl, alkyl sulfonyl, alkenyl sulfonyl, heteroaryloxy carbonyl, cycloheteroalkyloxy carbonyl, heteroarylalkyl, aminocarbonyl, substituted aminocarbonyl, alkyl aminocarbonyl, aryl aminocarbonyl, heteroarylalkenyl, cycloheteroalkylheteroarylalkyl, hydroxyalkyl, alkoxy, alkoxyaryloxy carbonyl, arylalkyloxy carbonyl, alkylaryloxy carbonyl, arylheteroarylalkyl, arylalkylarylalkyl, aryloxyarylalkyl, alkynyloxy carbonyl, haloalkoxyaryloxy carbonyl, alkoxy carbonylaryloxy carbonyl, aryloxyaryloxy carbonyl, arylsulfinylaryl carbonyl, arylthioaryl carbonyl, arylalkenyloxy carbonyl, heteroaryloxyarylalkyl, aryloxyaryl carbonyl, aryloxyarylalkyloxy carbonyl, arylalkyl carbonyl, aryloxyalkyloxy carbonyl, arylalkyl sulfonyl, arylthiocarbonyl, arylalkenyl sulfonyl, heteroaryl sulfonyl, aryl sulfonyl, alkoxyarylalkyl, heteroarylalkoxy carbonyl, arylheteroarylalkyl, alkoxyaryl carbonyl, aryloxyheteroarylalkyl, heteroarylalkyloxyarylalkyl, arylarylalkyl, arylalkenylarylalkyl, arylalkoxyarylalkyl, aryl carbonylarylalkyl, alkylaryloxyarylalkyl, arylalkoxy carbonyl heteroarylalkyl, heteroarylarylalkyl, aryl carbonyl heteroarylalkyl, heteroaryloxyarylalkyl, arylalkenyl heteroarylalkyl, aryl aminoarylalkyl, aminocarbonylarylalkyl or polyhaloalkylaryloxy carbonyl;

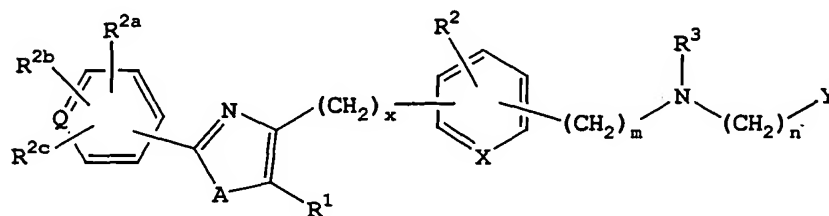
Y is CO₂R⁴ where R⁴ is H or alkyl, or a prodrug ester or Y is a C-linked 1-tetrazole, a phosphinic acid of the structure P(O)(OR^{4a})R⁵ where R^{4a} is H or a prodrug ester, R⁵ is alkyl or aryl or a phosphonic acid of the structure P(O)(OR^{4a})₂ where R^{4a} is H or a prodrug ester;

or stereoisomers thereof, prodrug esters thereof, and pharmaceutically acceptable salts thereof. --

--2. (Amended) The compound as defined in Claim 1 having the structure



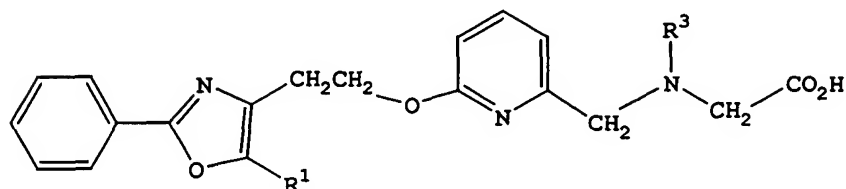
or



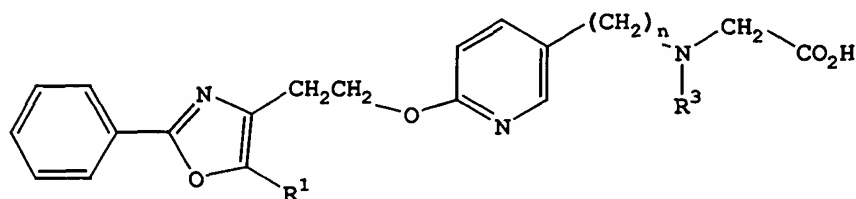
--10. (Amended) The compound as defined in Claim 1 wherein

$(CH_2)_x$ is CH_2 , $(CH_2)_2$, $(CH_2)_3$, or $\begin{array}{c} CH_3 \\ | \\ CH \\ | \\ CH_3 \end{array}$, $(CH_2)_m$ is CH_2 , or $\begin{array}{c} R_a \\ | \\ CH \end{array}$ where R_a is alkyl or alkenyl, $(CH_2)_n$ is CH_2 , R^1 is lower alkyl, R^2 is H, R^{2a} is H, R^4 is H, X is CH, and R^3 is arylalkyloxycarbonyl, arylheteroarylalkyl, aryloxyarylalkyl, arylalkyl, aryloxycarbonyl, haloaryloxycarbonyl, alkoxyaryloxycarbonyl, alkylaryloxycarbonyl, aryloxyaryloxycarbonyl, heteroaryloxyarylalkyl, heteroaryloxycarbonyl, aryloxyarylcarbonyl, arylalkenyloxycarbonyl, cycloalkylaryloxycarbonyl, arylalkylarylcarbonyl, heteroaryl-heteroarylalkyl, cycloalkyloxyaryloxycarbonyl, heteroaryl-heteroarylcarbonyl, alkyloxyaryloxycarbonyl, arylalkylsulfonyl, arylalkenylsulfonyl, alkoxyarylalkyl, arylthiocarbonyl, cycloheteroalkylalkyloxycarbonyl, cycloheteroalkyloxycarbonyl, or polyhaloalkylaryloxycarbonyl, which may be optionally substituted. --

--14. (Amended) The compound as defined in Claim 1 having the structure

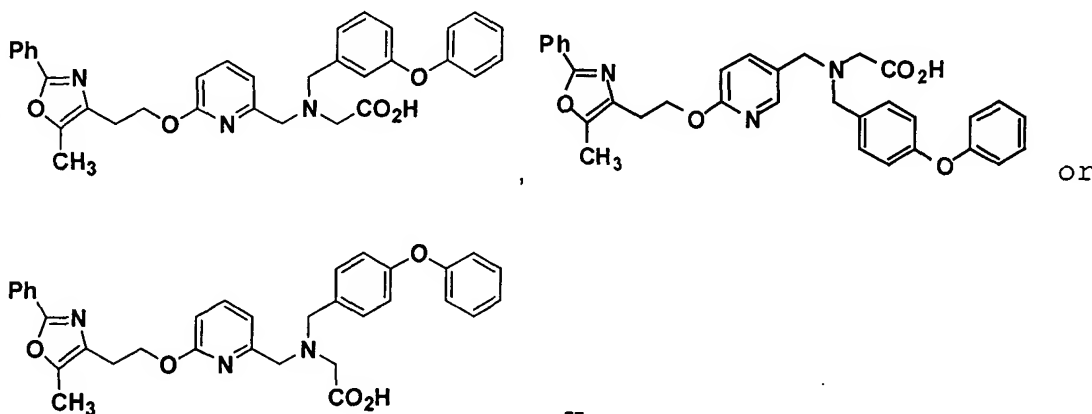


--15. (Amended) The compound as defined in Claim 1 having the structure



where $(CH_2)_n$ is CH_2 or $\begin{array}{c} CH_3 \\ | \\ CH \end{array}$ --

--17. (Amended) The compound as defined in Claim 1 having the structure



--34. (Amended) A method for lowering blood glucose levels or for treating diabetes or for treating a premalignant disease, an early malignant disease, a malignant disease, or a dysplastic disease, which comprises administering to a patient in need of treatment a therapeutically effective amount of a compound as defined in Claim 1. --

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

an angiotensin II receptor antagonist which is irbesartan, losartan or valsartan;
amlodipine besylate, prazosin HCl, verapamil, nifedipine, nadolol, propranolol, carvedilol, or
clonidine HCl; the platelet aggregation inhibitor is aspirin, clopidogrel, ticlopidine, dipyridamole or
ifetroban. --